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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/551,272	04/18/2000	Yajun Li	04873--065002	1789

26161 7590 07/25/2003

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BOSTON, MA 02110

EXAMINER

LAVARIAS, ARNEL C

ART UNIT	PAPER NUMBER
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2872

DATE MAILED: 07/25/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/551,272

Applicant(s)

LI ET AL.

Examiner

Arnel C. Lavarias

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 June 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 17,24,27,29 and 31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 17,24,27,29 and 31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. The amendments to Claim 29 in Paper No. 20, dated 6/2/03, are acknowledged and accepted.

Response to Arguments

2. The Applicants argue that, with respect to newly amended Claim 29, Barkan et al. fails to teach or reasonably suggest the light collection optical elements for a bar code scanner, wherein the collection lens comprises an axicon element shaped and positioned to elongate the focal depth of the collection lens. The Examiner respectfully disagrees. The Applicants are reminded of what an axicon is generally defined to be, as per, for example, www.photonics.com:

Axicon: An optical device that produces a line image lying along the axis from a point source of light; therefore, it has not definite focal length. A lens with a weak conical surface on one face.

Since the axicon produces a line image along the axis from the point source of light, the axicon will have a range of distance over which it will focus along the optical axis.

Although Barkan et al. does not specifically mention this, it is inherent to the operation of the device of Barkan et al. Furthermore, Barkan et al. does mention that the use of the axicons allows for differing depths of fields (See col. 12, lines 8-23), along with spot sizes, as pointed out by the Applicants.

3. Claims 17, 24, 27, 29, and 31 are rejected as follows.

Claim Objections

4. Claims 17, 24, 27, 29, and 31 are objected to because of the following informalities:
- Claim 29, line 2- 'connection' should read 'collection'. Claims 17, 24, 27, and 31 are dependent on Claim 29, and hence inherit the deficiencies of Claim 29.
- Appropriate correction is required.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claim 29 is rejected under 35 U.S.C. 102(b) as being anticipated by Barkan et al. (U.S. Patent No. 5278397).

See Section 5 in Paper No. 17, dated 1/2/03.

Additionally, with regard to the newly added limitation that the collection lens comprise an axicon element shaped and positioned to elongate the focal depth of the collection lens, the Examiner notes that inherently, axicons produce a line image lying along the axis from a point source of light, and hence will inherently produce an elongated depth of focus. Further, Barkan et al. mentions that the use of the axicons (See Axicon 1, Axicon 2 in Figure 7) allows for differing depths of fields (See col. 12, lines 8-23), as well as for differing spot sizes.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Barkan et al. in view of Kohayakawa (U.S. Patent No. 5523809) or Olmstead et al. (U.S. Patent No. 5814803).

See Section 7 in Paper No. 17, dated 1/2/03.

9. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Barkan et al. See Section 8 in Paper No. 17, dated 1/2/03.

10. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Barkan et al. in view of Olmstead et al.

See Section 9 in Paper No. 17, dated 1/2/03.

11. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Barkan et al. in view of Marom et al. (U.S. Patent No. 5331143 or '143) or Marom et al. (U.S. Patent No. 5315095 or '095).

See Section 10 in Paper No. 17, dated 1/2/03.

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arnel C. Lavarias whose telephone number is 703-305-4007. The examiner can normally be reached on M-F 8:30 AM - 5 PM EST.

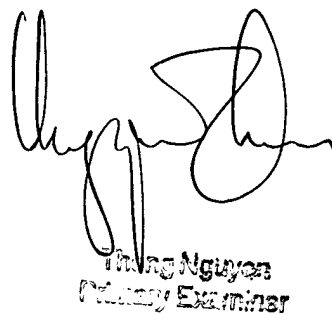
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on 703-305-0024. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-7722 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1782.



Arnel C. Lavarias
July 22, 2003



Thang Nguyen
Primary Examiner